three inches = one foot 6" 0
one and one half inches = one foot 1 6" 0
one inch = one foot 2 6" 0
three quarters inch = one foot 2 6" 0
one half inch = one foot 4 0
three eighths inch = one foot 4 0
one quarter inch = one foot 8 4 0
one eighth inch = one foot 16 8 4 0

VEGETATIVE STABILIZATION

SECTION 1 – VEGETATIVE STABILIZATION METHODS AND MATERIALS

A. SITE PREPARATION

i. INSTALL EROSION AND SEDIMENT CONTROL STRUCTURES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, OR SEDIMENT CONTROL BASIN.

ii. PERFORM ALL GRADING OPERATIONS AT RIGHT ANGLES TO THE SLOPE. FINAL GRADING AND SHAPING IS NOT USUALLY NECESSARY FOR TEMPORARY SEEDING.

iii. SCHEDULE REQUIRED SOIL TESTS TO DETERMINE SOIL AMENDMENT COMPOSITION AND APPLICATION RATES FOR SITES HAVING DISTURBED AREA OVER 5 ACRES.

B. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)

i. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIO AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OVER 5 ACRES. SOIL ANALYSIS MAY BE PERFORMED BY THE UNIVERSITY OF DISTRICT OF COLUMBIA OR A RECOGNIZED COMMERCIAL LABORATORY.

SOIL

SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSIS.

ii. FERTILIZERS SHALL BE UNIFORM IN COMPOSITION, FREE FLOWING, AND SUITABLE FOR ACCURATE APPLICATION BY APPROVED EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS SHALL BE DELIVERED TO THE SITE, FULLY LABELED ACCORDING TO APPLICABLE STATE OR TRADEMARK, AND WARRANTY OF THE PRODUCER.

iii. LIME MATERIALS SHALL BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED) WHICH CONTAINS AT LEAST 50% TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE SHALL BE GROUND TO SUCH FINENESS THAT AT LEAST 50% WILL PASS THROUGH A #100 MESH SIEVE, AND 98 TO 100% WILL PASS THROUGH A #20 MESH SIEVE.

iv. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 – 5" OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

C. SEEDBED PREPARATION

i. TEMPORARY SEEDING

a. SEEDBED PREPARATION SHALL CONSIST OF LOOSENING SOIL TO A DEPTH OF 3 INCHES TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS, CHISEL PLOWS, OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT SHOULD NOT BE ROLLED OR DRAGGED SMOOTH, BUT LEFT IN THE ROUGHENED CONDITION. SLOPED AREAS (GREATER THAN 3:1) SHOULD BE TRACKED BY A DOZER LEAVING THE SURFACE IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.

b. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.

c. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

D. SEED SPECIFICATIONS

i. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED SHALL BE SUBJECT TO RE–TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED SHALL HAVE BEEN TESTED WITHIN 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON THIS JOB.

NOTE: SEED TAGS SHALL BE MADE AVAILABLE TO THE INSPECTOR TO VERIFY TYPE AND RATE OF SEED USED.

ii. INOCULANT – THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES SHALL BE A PURE CULTURE OF NITROGEN–FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS SHALL NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANT AS DIRECTED ON PACKAGE. USE FOUR TIME THE RECOMMENDED RATE WHEN HYDRO SEEDING. IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75–80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE INOCULANT LESS EFFECTIVE.

E. METHODS OF SEEDING

i. HYDRO SEEDING: APPLY SEED UNIFORMLY WITH HYDRO SEEDER (SLURRY INCLUDES SEED AND FERTILIZER), BROADCAST OR DROP SEEDER, OR A CULTIPACKER SEEDER.

a. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES AMOUNTS WILL NOT EXCEED THE FOLLOWING NITROGEN – MAXIMUM OF 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHOROUS): 200 POUNDS/ACRE; K20 (POTASSIUM): 200 POUNDS/ACRE.

b. LIME – USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDRO SEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDRO SEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDRO SEEDING.

c. SEED AND FERTILIZER SHALL BE MIXED ON SITE, AND SEEDING SHALL BE DONE IMMEDIATELY WITHOUT INTERRUPTION.

ii. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.

a. SEED SPREAD SHALL BE INCORPORATED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON THE TEMPORARY OR PERMANENT SEEDING SUMMARIES. THE SEEDED AREA SHALL THEN BE ROLLED WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.

b. WHERE PRACTICAL, SEED SHOULD BE APPLIED IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.

iii. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.

a. CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING.

b. WHERE PRACTICAL, SEED SHOULD BE APPLIED IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.

F. MULCH SPECIFICATIONS (IN ORDER OF PREFERENCE)

i. STRAW SHALL CONSIST OF THOROUGHLY THRESHED WHEAT, RYE OR OAT STRAW, REASONABLY BRIGHT IN COLOR, AND SHALL NOT BE MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY, AND SHALL BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE NRCS SEED LAW.

ii. WOOD CELLULOSE FIBER MULCH (WCFM)

a. WCFM SHALL CONSIST OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.

b. WCFM SHALL BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE THE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.

c. WCFM, INCLUDING DYE, SHALL CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.

d. WCFM SHALL BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER, AND OTHER ADDITIVES TO FORM A HOMOGENOUS SLURRY. THE MULCH MATERIAL SHALL FORM AB BLOTTER–LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND SHALL COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.

e. WCFM SHALL CONTAIN NO ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO–TOXIC.

f. WOOD CELLULOSE FIBER MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH TO APPROXIMATELY 10 MM., DIAMETER APPROXIMATELY 1 MM., pH RANGE OF 4.0 TO 8.5 ASH CONTENT OF 1.6% MAXIMUM, AND WATER HOLDING CAPACITY OF 90% MINIMUM.

NOTE: ONLY STERILE STRAW MULCH SHOULD BE USED IN AREAS WHERE A STAND OF ONE SPECIES OF GRASS IS DESIRED.

G. MULCHING SEEDED AREAS – MULCH SHALL BE APPLIED TO ALL SEEDED AREAS

IMMEDIATELY AFTER SEEDING.

i. IF GRADING IS COMPLETED OUTSIDE OF THE SEEDING SEASON, MULCH ALONE SHALL BE APPLIED AS PRESCRIBED IN THIS SECTION AND MAINTAINED UNTIL THE SEEDING SEASON RETURNS, AND SEEDING CAN BE PERFORMED IN ACCORDANCE WITH THESE SPECIFICATIONS.

ii. WHEN STRAW MULCH IS USED, IT SHALL BE SPREAD OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS/ACRE. MULCH SHALL BE APPLIED TO A UNIFORM LOOSE DEPTH OF BETWEEN 1 AND 2 INCHES. MULCH APPLIED SHALL ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACED IS NOT EXPOSED. IF A MULCH ANCHORING TOOL IS TO BE USED, THE RATE SHOULD BE INCREASED TO 2.5 TONS/ACRE.

iii. WOOD CELLULOSE FIBER USED AS A MULCH SHALL BE APPLIED AT A NET DRY WEIGHT OF 1,500 LBS. PER ACRE. THE WOOD CELLULOSE

FIBER SHALL BE MIXED WITH WATER, AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LBS. OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

H. SECURING STRAW MULCH (MULCH ANCHORING)" MULCH ANCHORING SHALL BE PERFORMED IMMEDIATELY FOLLOWING MULCH APPLICATION TO MINIMIZE LOSE BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE). DEPENDING UPON SIZE OF AREA AND EROSION HAZARD.

i. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS IS THE MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED IN SLOPING LAND, THIS PRACTICE SHOULD BE USED ON THE CONTOUR, IF POSSIBLE.

ii. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. THE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LBS./ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER, AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LBS. OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

iii. APPLICATIONS OF LIQUID BINDERS SHOULD BE APPLIED HEAVIER AT EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. THE REMAINDER OF AREA SHOULD BE UNIFORM AFTER BINDER APPLICATION. SYNTHETIC BINDERS – SYNTHETIC BINDERS SUCH AS ACRYLIC DRL (AGRO–TACK). DCA–70, PETROSET, TERRA TAX II, TERRA TACK AR, OR THERE APPROVED EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH.

iv. LIGHTWEIGHT: PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.

SECTION II: TEMPORARY SEEDING

VEGETATION – ANNUAL GRASS OR GRAIN USED TO PROVIDE COVER ON DISTURBED AREAS FOR UP TO TWELVE MONTHS. FOR LONGER DURATION OF VEGETATIVE COVER, PERMANENT SEEDING IS REQUIRED.

A. SEED MIXTURES (HARDINESS ZONE 6B) – TEMPORARY SEEDING

Species	Minimum Seeding Rate (lbs/Ac	lbs/1000sf)	Planting Depth (inches)	Seeding Dates 3/1–4/30	Seeding Dates 5/1–8/14
Choose one:					
Barley	122	2.80	1–2	X	–
Oats	96	2.21	1–2	X	–
Rye	140	3.22	1–2	X	–
Barley or Rye plus Foxtail Millett	150	3.45	1	X X	X X
Weeping Lovegrass	4	0.09	1/4 –1/2	–	X
Annual Ryegrass	50	1.15	1/4 –1/2	X	–
Millett	50	1.15	1/2	–	X

FERTILIZER RATE (10–10–10) 600 LBS/AC OR 14 LBS/1000 SF

LIME RATE 2 TONS/AC OR 92 LBS/1000 SF

SOILS:

SEDIMENT CONTROL PRACTICES:

SEE SHEETS CG501–502 FOR DETAILS OF SEDIMENT CONTROL PRACTICES TO BE USED AT THE SITE.

PERMANENT VEGETATIVE STABILIZATION:

THE DISTURBED AREAS WILL BE STABILIZED PER THE SEQUENCE OF OPERATIONS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.

STANDARD EROSION AND SEDIMENT CONTROL NOTES

1. ALL SEDIMENT AND EROSION CONTROL PRACTICES THAT ARE INTENDED FOR USE PRIOR TO EXCAVATION SHALL BE INSTALLED BEFORE THE START OF EXCAVATION AND/OR DEMOLITION AS PER THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR THE DISTRICT OF COLUMBIA. IF ANY ON–SITE INSPECTION REVEALS FURTHER EROSION CONTROL MEASURES ARE NECESSARY, THE SAME SHALL BE PROVIDED.
2. ALL DEBRIS SHALL BE REMOVED FROM THE SITE.
3. ADJACENT STREETS AND SIDEWALKS SHALL BE SWEPT CLEAN AT ALL TIMES DURING DEMOLITION AND EXCAVATION OPERATIONS. DURING EXCAVATION AND DEMOLITION OPERATIONS, EXCAVATED MATERIAL SHALL BE TEMPORARILY STOCKPILED ON HE SITE, UPHILL FROM THE EXCAVATED AREA SO THAT ANY SEDIMENT EROSION WILL BE DIRECTED TO THE EXCAVATION AREA.
4. ANY STOCKPILING, REGARDLESS OF LOCATION SHALL BE STABILIZED AND COVERED WITH PLASTIC OR CANVAS, AFTER ITS ESTABLISHMENT AND FOR DURATION OF THE PROJECT.
5. ALL CATCH BASINS, INLETS AND DRAIN AREAS SHALL BE PROTECTED DURING EXCAVATION AND CONSTRUCTION.
6. IF ANY CATCH BASINS OR DRAINS BECOME CLOGGED AS A RESULT OF DEMOLITION, EXCAVATION OR CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS CLEANING.
7. AFTER RAZING OR DEMOLITION, THERE IS THE NEED FOR GROUNDCOVER TO PREVENT EROSION AND SEDIMENT RUNOFF FROM OCCURRING. SUCH AS APPLYING SEED, SOD, PAVE, BRICKBAT OR MULCH, ETC.
8. THE SITE'S APPROVAL LETTER, APPROVED EROSION AND SEDIMENT CONTROL PLANS, DAILY LOG BOOKS AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY AUTHORIZED OFFICIALS OF DCRA RESPONSIBLE FOR PROJECT.
9. TEMPORARY SEDIMENT CONTROL DEVICES MAY BE REMOVED, WITH PERMISSION OF DCRA INSPECTOR, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL.
10. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE DCRA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. REFER TO APPROPRIATE SPECIFICATIONS FOR TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SODDING AND GROUND COVERS.
11. SEDIMENT CONTROL FOR UTILITY CONSTRUCTION FOR AREAS OUTSIDE OF DESIGNED CONTROLS OR AS DIRECTED BY ENGINEER OR DCRA INSPECTOR:

(A) CALL "MISS UTILITY" AT 1–800–257–7777 72 HOURS PRIOR TO THE START OF WORK.
(B) EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH.
(C) TRENCHES FOR UTILITY INSTALLATION SHALL BE BACKFILLED, COMPACTED AND STABILIZED AT THE END OF EACH WORKING DAY. NO MORE TRENCHES SHALL BE OPENED THAN CAN BE COMPLETED THE SAME DAY.
(D) TEMPORARY SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED FOR MORE THAN ONE DAY.

DISTRICT OF COLUMBIA ALAN K. ARNOLD PE906144 CIVIL PROFESSIONAL ENGINEER 4-9-2013

THIS PLAN IS FOR SEDIMENT CONTROL USE ONLY.

Revisions:	Date
ISSUE 1 - ISSUE FOR CONSTRUCTION	04.30.2013
95 % SUBMISSION	02.17.2012
75 % SUBMISSION	03.16.2011
25 % SUBMISSION	10.29.2010

CONSULTANTS:

GREENHORNE & O'MARA, INC.
6110 FROST PLACE
LAUREL, MD 20707
PHONE: 301-982-2800
FAX: 301-220-2619

ARCHITECT/ENGINEERS:

EWING COLE
1025 Connecticut Avenue, NW
Suite 900
Washington, DC 20036-5405
Tel: 202-467-1500 Fax: 202-296-8950

Drawing Title	Civil Sediment and Erosion Control Notes
Approved Project Director	
Project Title	OIF / OEF WELCOME CENTER DEPARTMENT OF VETERANS AFFAIRS VAMC
Location	Veterans Affairs Medical Center 50 Irving Street NW Washington DC
Date	4-30-2013
Checked	JMS
Drawn	EI
Project Number	688-334 OIF/OEF
Building Number	-
Drawing Number	CG500

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08–6231

STANDARDS AND SPECIFICATIONS FOR DUST CONTROL

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.

2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.

3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLE OF ACCESSING ALL WORK AREAS.

4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON-SITE. THESE CONTROL MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED TO PREVENT DUST EMISSIONS.

5. FOR WATER APPLICATION TO UNDISTURBED SOIL SURFACES, THE CONTRACTOR SHALL;

   A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP WITH DISCHARGE PRESSURE GAUGE;

   B. ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER;

   C. DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (137.8 K PA) MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.

6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITION AND/OR EXCAVATION, THE CONTRACTOR SHALL;

   A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES.

   B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.

   C. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND THE SITE BOUNDARIES.

OFF-SITE SPOIL, WASTE, OR BORROW AREAS IN THE DISTRICT OF COLUMBIA OR ON FEDERAL PROPERTY MUST HAVE PRIOR APPROVAL BY DCRA. ALL WASTE AND BORROW AREAS OFF-SITE MUST BE PROTECTED BY SEDIMENT CONTROL MEASURES AND STABILIZED IN ACCORDANCE WITH THE ORDINANCES AND REGULATIONS OF JURISDICTION WHERE THE SPOIL, WASTE, OR BORROW AREA IS LOCATED/STABILIZED.

SITE INFORMATION:

TOTAL AREA OF SITE: 34.7 ACRES
DISTURBED AREA: 0.14 ACRES
TOTAL CUT: 400 CU YDS *
TOTAL FILL: 0 CU YDS *

* THESE NUMBERS ARE FOR PERMIT PURPOSES ONLY AND NOT FOR BIDDING.

PROJECT DESCRIPTION (NARRATIVE):

THE PROPOSED ADDITION IS LOCATED IN THE NE QUADRANT OF THE VETERAN'S AFFAIRS MEDICAL CENTER BUILDING NO.1 AND WILL OCCUPY AN AREA WHICH IS CURRENTLY A GRASSED COURTYARD. THE PROPOSED STRUCTURE WILL CONNECT TO THE EXISTING BUILDING ON THE EAST, WEST AND SOUTH SIDES. THE ENTRANCE TO THE PROPOSED STRUCTURE WILL BE LOCATED ON THE NORTH SIDE WHICH FACES AN ACCESS ROAD AND A CANOPY COVERED PEDESTRIAN LOADING AND UNLOADING AREA.

ADJACENT AREA:
THE SURROUNDING AREAS ARE DEVELOPED, AND WILL NOT BE AFFECTED BY CONSTRUCTION.

SEQUENCE OF OPERATIONS

GENERAL SEQUENCE FOR ALL PROJECT SITE:

1. CONTRACTOR TO SECURE ALL NECESSARY PERMITS, AND CONDUCT A PRE-CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR PRIOR TO START OF DEMOLITION, EXCAVATION OR ANY LAND DISTURBANCE. CONTACT THE WATERSHED PROTECTION DIVISION AT 202-535-2240 AT LEAST 24 HOURS BEFORE THE START OF CONSTRUCTION.

2. ALL SEDIMENT AND EROSION CONTROL PRACTICES THAT ARE INTENDED FOR USE PRIOR TO EXCAVATION SHALL BE INSTALLED BEFORE THE START OF EXCAVATION AND/OR DEMOLITION AS PER THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR THE DISTRICT OF COLUMBIA. IF ANY ON-SITE INSPECTION REVEALS FURTHER EROSION CONTROL MEASURES ARE NECESSARY, THE SAME SHALL BE PROVIDED. CONTRACTOR TO PROVIDE INLET PROTECTION AT ALL STORM DRAIN INLETS AS INDICATED.
IF STORM DRAIN INLETS BECOME CLOGGED AS A RESULT OF EXCAVATION OR DEMOLITION OPERATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS CLEANING.

3. BEGIN EXCAVATION. DURING THE COURSE OF EXCAVATION THE CONTRACTOR SHALL INSURE THAT DEWATERING IS PROVIDED IF NEEDED. DEWATER THE SITE WITH THE USE OF SUMP PITS, BEFORE LETTING STORM WATER LEAVE THE SITE. THE LOCATION OF THE SUMP PITS MAY BE AT THE DISCRETION OF THE CONTRACTOR.

4. IMMEDIATELY AFTER REACHING THE BOTTOM OF THE REQUIRED EXCAVATION, SUMP PITS SHALL BE PROVIDED FOR DEWATERING, IF NEEDED.

5. THE SEDIMENT CONTROL PRACTICES SHALL BE INSPECTED DAILY BY THE CONTRACTOR, AND ANY DAMAGED OR CLOGGED SILTATION OF EROSION CONTROL DEVICES OR MEASURES SHALL BE REPAIRED IMMEDIATELY.

6. ALL DEBRIS SHALL BE REMOVED FROM THE SITE. ADJACENT STREETS AND SIDEWALKS SHALL BE SWEPT CLEAN AT ALL TIMES DURING DEMOLITION AND EXCAVATION OPERATIONS. DURING EXCAVATION AND DEMOLITION OPERATIONS, NO EXCAVATED MATERIAL SHALL BE TEMPORARILY STOCKPILED ON THE SITE, ALL EXCAVATED MATERIAL MUST BE IMMEDIATELY HAULED OFF-SITE.

7. THE CONTRACTOR SHALL HAUL ALL EXCAVATED MATERIAL OFF-SITE TO A LOCATION WITH AN APPROVED BY DC-DOE.

8. AFTER COMPLETION OF FINAL GRADING, PERMANENT STABILIZATION SHALL BE INSTALLED.

9. EROSION AND SEDIMENT CONTROL DEVICES CAN BE REMOVED ONLY AFTER ALL AREAS DRAINING TO THE DEVICES HAVE BEEN PERMANENTLY STABILIZED, AND APPROVAL FROM THE INSPECTOR HAS BEEN OBTAINED.

SEDIMENT CONTROL APPROVAL

WPD FILE NUMBER _____

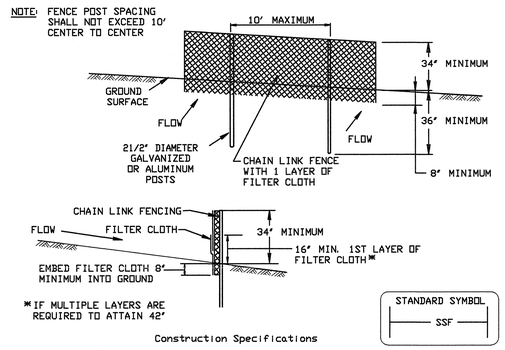
THIS APPROVAL IS FOR GRADING AND SEDIMENT CONTROL PERMIT ONLY. THE APPLICANT IS REQUIRED TO CONSTRUCT DESIGN FEATURES AS SHOWN ON THESE APPROVED PLANS. THE APPLICANT MUST NOTIFY THE WATERSHED PROTECTION DIVISION AT 202-535-2240, AT LEAST 24 HOURS PRIOR TO THE START OF GRADING ACTIVITY AND WITHIN TWO (2) WEEKS AFTER COMPLETION OF PROJECT TO REQUEST FINAL INSPECTION. IF THERE IS NEED TO MAKE CHANGES OR MODIFICATIONS IN THE APPROVED DESIGN, THE WATERSHED PROTECTION DIVISION MUST BE NOTIFIED IMMEDIATELY.

APPROVED BY: _____ DATE: _____

CALL MISS UTILITY
TELEPHONE 1-800-257-7777
FOR UTILITY LOCATIONS
AT LEAST 72-HOURS BEFORE
BEGINNING DEMOLITION AND OR
EXCAVATION

THIS PLAN IS FOR SEDIMENT CONTROL USE ONLY.

DETAIL 5 - SUPER SILT FENCE



STANDARD SYMBOL
SSF

Construction Specifications

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.

2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

4. Filter cloth shall be embedded a minimum of 8" into the ground.

5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.

6. Maintenance shall be performed as needed and silt buildups removed when 'bulges' develop in the silt fence, or when silt reaches 30% of fence height

7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: ASTM D-4595
Tensile Modulus	20 lbs/in (min.)	Test: ASTM D-4595
Flow Rate	0.3 gal/ft²/minute (max.)	Test: ASTM D-5141
Filtering Efficiency	75% (min.)	Test: ASTM D-5141

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE	PAGE B - 6 - 3	WATERSHED PROTECTION DIVISION DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH

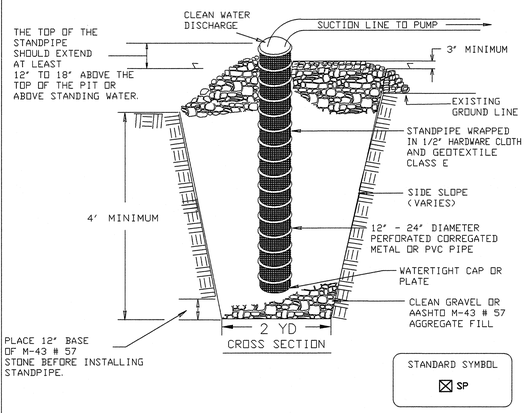
SUPER SILT FENCE

Design Criteria
NATURAL RESOURCE CONSERVATION SERVICE

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 5:1	200 feet	1,500 feet
20 - 33%	5:1 - 3:1	100 feet	1,000 feet
33 - 50%	3:1 - 2:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE	PAGE B - 6 - 4	WATERSHED PROTECTION DIVISION DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH

DETAIL 32B - SUMP PIT



STANDARD SYMBOL
SP

Construction Specifications

1. Pit dimensions are variable, with the minimum diameter being 2 times the standpipe diameter.

2. The standpipe should be constructed by perforating a 12" to 24" diameter corrugated or PVC pipe. Then wrapping with 1/2" hardware cloth and Geotextile Class E. The perforations shall be 1/2" x 6" slits or 1" diameter holes.

3. A base of filter material consisting of clean gravel or #57 stone should be placed in the pit to a depth of 12". After installing the standpipe, the pit surrounding the standpipe should then be backfilled with the same filter material.

4. The standpipe should extend 12" to 18" above the lip of the pit or the riser crest elevation (basin dewatering only) and the filter material should extend 3' minimum above the anticipated standing water elevation.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE	PAGE G - 24 - 3	WATERSHED PROTECTION DIVISION DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH

ISSUE 1 - ISSUE FOR CONSTRUCTION	04.30.2013
95 % SUBMISSION	02.17.2012
75 % SUBMISSION	03.16.2011
25 % SUBMISSION	10.29.2010
Revisions:	Date

CONSULTANTS:

GREENHORNE & O'MARA, INC.
6110 FROST PLACE
LAUREL, MD 20707
PHONE: 301-982-2800
FAX: 301-220-2619

DISTRICT OF COLUMBIA · ALAN K. ARNOLD · 19906144 · CIVIL · PROFESSIONAL ENGINEER · 5-9-2013

ARCHITECT/ENGINEERS:

EWING COLE
1025 Connecticut Avenue, NW
Suite 900
Washington, DC 20036-5405
Tel: 202-467-1500 Fax: 202-296-8950

Drawing Title: **Civil Sediment and Erosion Control Notes and Details**

Approved Project Director

Project Title: OIF / OEF WELCOME CENTER
DEPARTMENT OF VETERANS AFFAIRS
VAMC

Location: Veterans Affairs Medical Center
50 Irving Street NW Washington DC

Date: 4-30-2013 | Checked: JMS | Drawn: EI

Project Number: 688-334 OIF/OEF

Building Number: -

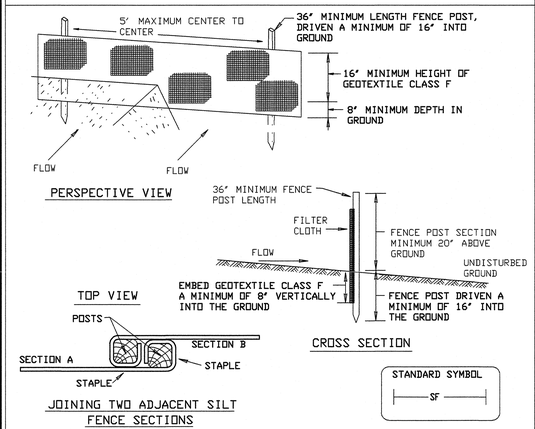
Drawing Number: CG501

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

DETAIL 4 - SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: ASTM D-4595
Tensile Modulus	20 lbs/in (min.)	Test: ASTM D-4595
Flow Rate	0.3 gal/ft²/minute (max.)	Test: ASTM D-5141
Filtering Efficiency	75% (min.)	Test: ASTM D-5141

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 30% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE	PAGE B - 5 - 3	WATERSHED PROTECTION DIVISION DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH

SILT FENCE

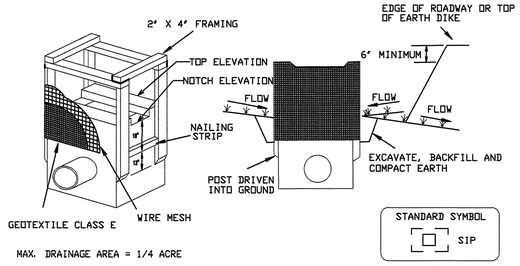
Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE	PAGE B - 5 - 4	WATERSHED PROTECTION DIVISION DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH

DETAIL 6A - STANDARD INLET PROTECTION



MAX. DRAINAGE AREA = 1/4 ACRE

Construction Specifications

1. Excavate completely around the inlet to a depth of 18" below the notch elevation.

2. Drive the 2" x 4" construction grade lumber posts 1' into the ground at each corner of the inlet. Place nail strips between the posts on the ends of the inlet. Assemble the top portion of the 2" x 4" frame using the overlap joint shown on Detail 6A. The top of the frame (weir) must be 6" below adjacent roadways where flooding and safety issues may arise.

3. Stretch the 1/2" x 1/2" wire mesh tightly around the frame and fasten securely. The ends must meet and overlap at a post.

4. Stretch the Geotextile Class E tightly over the wire mesh with the geotixtile extending from the top of the frame to 18" below the inlet notch elevation. Fasten the geotextile firmly to the frame. The ends of the geotextile must meet at a post, be overlapped and folded, then fastened down.

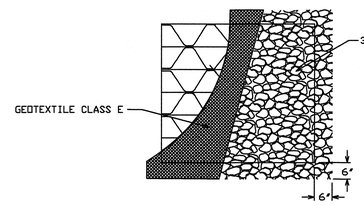
5. Backfill around the inlet in compacted 6" layers until the layer of earth is level with the notch elevation on the ends and top elevation on the sides.

6. If the inlet is not in a sump, construct a compacted earth dike across the ditch line directly below it. The top of the earth dike should be at least 6" higher than the top of the frame.

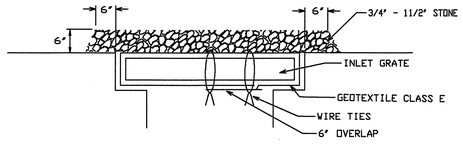
7. The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clogged.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE	PAGE B - 7 - 5	WATERSHED PROTECTION DIVISION DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH

DETAIL 6B - AT GRADE INLET PROTECTION



PLAN/CUT AWAY VIEW



CROSS SECTION

STANDARD SYMBOL
AGIP

MAX. DRAINAGE AREA = 1/4 ACRE

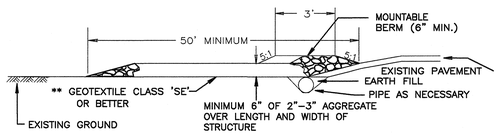
Construction Specifications

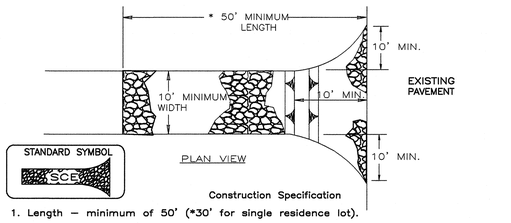
1. Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.

2. Place 3/4" to 11/2" stone, 4"-6" thick on the grate to secure the fabric and provide additional filtration.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE	PAGE B - 7 - 6	WATERSHED PROTECTION DIVISION DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH

DETAIL 1 - STABILIZED CONSTRUCTION ENTRANCE





Construction Specification

1. Length – minimum of 50' (*30' for single residence lot).

2. Width – 10' minimum, should be flared at the existing road to provide a turning radius.

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

4. Stone – crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water – all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required. The mountable berm is required on all SCEs not located at a high spot.

6. Location – A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE	PAGE A - 1 - 3	WATERSHED PROTECTION DIVISION DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH

STABILIZED CONSTRUCTION ENTRANCE

Construction Specification

1. Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to ** residences to use geotextile.

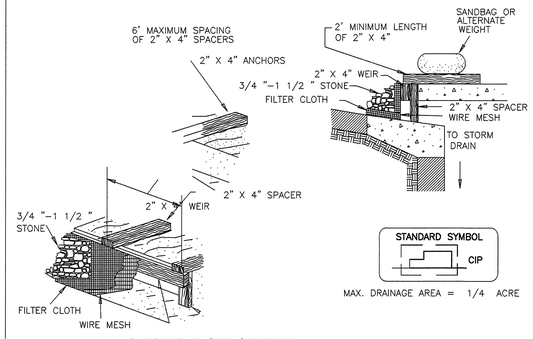
4. Stone - crushed aggregate (2" to 3"), or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE	PAGE A - 1 - 4	WATERSHED PROTECTION DIVISION DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH

DETAIL 6C – CURB INLET PROTECTION (COG OR COS INLETS)



MAX. DRAINAGE AREA = 1/4 ACRE

Construction Specifications

1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard

2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.

3. Securely nail the 2" X 4" weir to a 9' long vertical spacer to be located between the weir and the inlet face (max. 4' apart).

4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.

5. The assembly shall be placed so that the end spacers are a minimum 1' beyond drawing.

6. Form the 1/2 ' x 1/2 ' wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4 ' x 1 1/2 ' stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.

7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet. both ends of the throat opening.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE	PAGE B - 7 - 7	WATERSHED PROTECTION DIVISION DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH

THIS PLAN IS FOR SEDIMENT CONTROL USE ONLY.

ISSUE 1 - ISSUE FOR CONSTRUCTION	04.30.2013
95 % SUBMISSION	02.17.2012
75 % SUBMISSION	03.16.2011
25 % SUBMISSION	10.29.2010
Revisions:	Date

CONSULTANTS:

GREENHORNE & O'MARA, INC.
6110 FROST PLACE
LAUREL, MD 20707
PHONE: 301-982-2800
FAX: 301-220-2619

DISTRICT OF COLUMBIA · ALAN K. ARNOLD · PE906144 · CIVIL · PROFESSIONAL ENGINEER · 5-7-2013

ARCHITECT/ENGINEERS:

EWING COLE
1025 Connecticut Avenue, NW
Suite 900
Washington, DC 20036-5405
Tel: 202-467-1500 Fax: 202-296-8950

Drawing Title	Civil Sediment and Erosion Control Details
Approved Project Director	
Project Title	OIF / OEF WELCOME CENTER DEPARTMENT OF VETERANS AFFAIRS VAMC
Location	Veterans Affairs Medical Center, 50 Irving Street NW Washington DC
Date	4-30-2013
Checked	JMS
Drawn	EI
Project Number	688-334 OIF/OEF
Building Number	-
Drawing Number	CG502

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

6/25/2012 3:29:07 PM, jswann

STATEMENT BY PROFESSIONAL ENGINEER REGISTERED IN THE DISTRICT OF COLUMBIA

THIS IS TO CERTIFY THAT THE ENGINEERING FEATURES OF THIS STORMWATER DISCHARGE FACILITY HAVE BEEN DESIGNED/EXAMINED BY ME AND FOUND TO BE IN COMFORMITY WITH MODERN ENGINEERING PRINCIPLES APPLICABLE TO THE TREATMENT AND DISPOSAL OF STORMWATER POLLUTANTS. I FURTHER CERTIFY THAT THE FACILITY HAS BEEN DESIGNED IN ACCORDANCE WITH THE SPECIFICATION REQUIRED UNDER SECTION 526 THROUGH 535 OF DCMR-21, CHAPTER 5. IT IS ALSO STATED THAT THE UNDERSIGNED HAS FURNISHED THE APPLICANT WITH A SET OF INSTRUCTIONS FOR THE MAINTENANCE AND OPERATION OF THE STORMWATER DISCHARGE FACILITY.

SIGNATURE OF ENGINEER

Alan K Arnold Senior Principal

NAME AND TITLE (PLEASE PRINT)

6110 FROST PLACE

LAUREL, MARYLAND 20707

ADDRESS

5-9-2013 (301) 982-2800

DATE TELEPHONE

AFFIX SEAL

DISTRICT OF COLUMBIA ALAN K. ARNOLD PE906144 CIVIL PROFESSIONAL ENGINEER

AS BUILT CERTIFICATION

I HEREBY CERTIFY THAT STORMWATER DISCHARGE FACILITY HAS BEEN BUILT SUBSTANTIALLY IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THAT ANY SUBSTANTIAL DEVIATIONS (NOTED BELOW) WILL NOT PREVENT THE SYSTEM FROM FUNCTIONING IN COMPLIANCE WITH THE REQUIREMENTS OF SECTION 526 OF DCMR-21, CHAPTER 5 WHEN PROPERLY MAINTAINED AND OPERATED. THESE DETERMINATIONS HAVE BEEN BASED UPON ON-SITE OBSERVATION OF CONSTRUCTION, SCHEDULED AND CONDUCTED BY ME OR BY A PROJECT REPRESENTATIVE UNDER MY DIRECT SUPERVISION. I HAVE ENCLOSED ONE SET OF AS-BUILT ENGINEERING DRAWINGS.

SIGNATURE OF ENGINEER — NAME (PLEASE TYPE) D.C. REG. NO.

AFFIX SEAL

GREENHORNE & O'MARA
COMPANY NAME

6110 FROST PLACE LAUREL, MD. 20707
COMPANY ADDRESS

(301) 982-2800
DATE PHONE NO.

SUBSTANTIAL DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS (SHEET ATTACHED IF REQUIRED)

STATEMENT BY PERSON RESPONSIBLE FOR MAINTENANCE

THE UNDERSIGNED AGREES TO MAINTAIN AND OPERATE THE DISCHARGE FACILITIES IN SUCH A MANNER AS TO COMPLY WITH THE PROVISIONS OF SECTION 526 OF DCMR-21, CHAPTER 5. RESPONSIBILITY FOR MAINTENANCE AND OPERATION MAY BE TRANSFERED TO AN OTHER ENTITY UPON WRITTEN NOTICE TO WATERSHED PROTECTION DIVISION OF THE DEPARTMENT OF HEALTH FROM THE UNDERSIGNED AND THE ENTITY ASSUMING RESPONSIBILITY, CERTIFYING THAT THE TRANSFER OF RESPONSIBILITY FOR MAINTENANCE AND OPERATION IN COMPLIANCE WITH SECTION 526 OF DCMR-21, CHAPER 5 HAS BEEN ACCEPTED.

SIGNATURE OF THE PERSON RESPONSIBLE FOR MAINTENANCE (IT MAY BE THE APPLICANT)

NAME AND TITLE (PLEASE TYPE)

ADDRESS

DATE TELEPHONE NO.

THIS PLAN IS FOR SEDIMENT CONTROL USE ONLY.

Revisions	Date
ISSUE 1 - READY TO ADVERTISE	04.30.2013
95 % SUBMISSION	02.17.2012
75 % SUBMISSION	03.16.2011
25 % SUBMISSION	10.29.2010

CONSULTANTS:

GREENHORNE & O'MARA, INC.
6110 FROST PLACE
LAUREL, MD 20707
PHONE: 301-982-2800
FAX: 301-220-2619

DISTRICT OF COLUMBIA ALAN K. ARNOLD PE906144 CIVIL PROFESSIONAL ENGINEER 5.9.2013

ARCHITECT/ENGINEERS:

EWING COLE
1025 Connecticut Avenue, NW
Suite 900
Washington, DC 20036-5405
Tel: 202-467-1500 Fax: 202-296-8950

Drawing Title: Civil Sediment and Erosion Certifications

Approved: Project Director

Project Title: OIF / OEF WELCOME CENTER
DEPARTMENT OF VETERANS AFFAIRS
VAMC

Location: Veterans Affairs Medical Center
50 Irving Street NW Washington DC

Date: 4-30-2013 | Checked: JMS | Drawn: EI

Project Number: 688-334 OIF/OEF

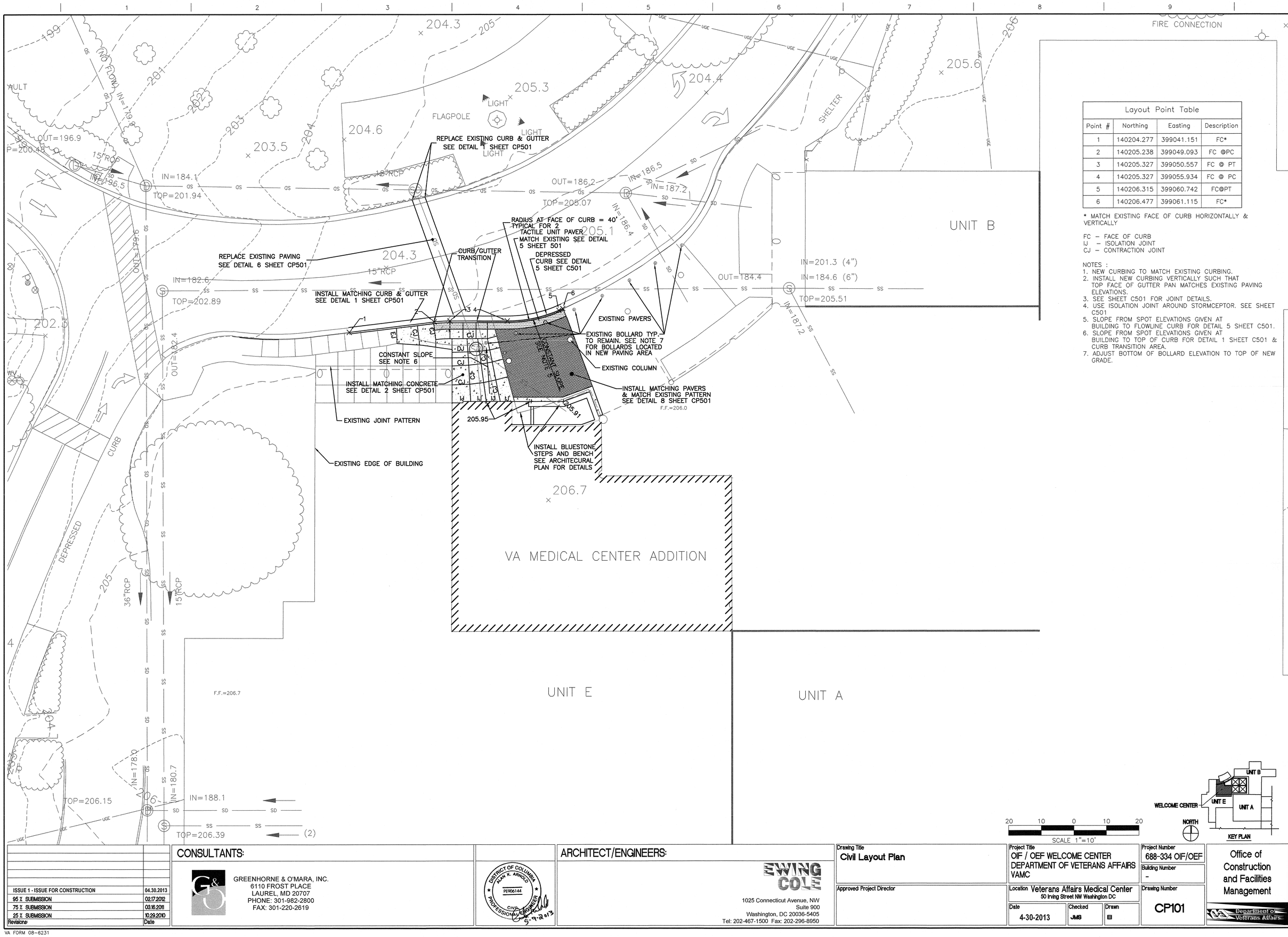
Building Number: -

Drawing Number: CG503

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



Layout Point Table			
Point #	Northing	Easting	Description
1	140204.277	399041.151	FC*
2	140205.238	399049.093	FC @PC
3	140205.327	399050.557	FC @ PT
4	140205.327	399055.934	FC @ PC
5	140206.315	399060.742	FC@PT
6	140206.477	399061.115	FC*

* MATCH EXISTING FACE OF CURB HORIZONTALLY & VERTICALLY

FC – FACE OF CURB
IJ – ISOLATION JOINT
CJ – CONTRACTION JOINT

NOTES :
1. NEW CURBING TO MATCH EXISTING CURBING.
2. INSTALL NEW CURBING VERTICALLY SUCH THAT TOP FACE OF GUTTER PAN MATCHES EXISTING PAVING ELEVATIONS.
3. SEE SHEET C501 FOR JOINT DETAILS.
4. USE ISOLATION JOINT AROUND STORMCEPTOR. SEE SHEET C501
5. SLOPE FROM SPOT ELEVATIONS GIVEN AT BUILDING TO FLOWLINE CURB FOR DETAIL 5 SHEET C501.
6. SLOPE FROM SPOT ELEVATIONS GIVEN AT BUILDING TO TOP OF CURB FOR DETAIL 1 SHEET C501 & CURB TRANSITION AREA.
7. ADJUST BOTTOM OF BOLLARD ELEVATION TO TOP OF NEW GRADE.

SCALE 1"=10'

Revisions	Date
ISSUE 1 - ISSUE FOR CONSTRUCTION	04.30.2013
95 % SUBMISSION	02.17.2012
75 % SUBMISSION	03.16.2011
25 % SUBMISSION	10.29.2010

CONSULTANTS:

GREENHORNE & O'MARA, INC.
6110 FROST PLACE
LAUREL, MD 20707
PHONE: 301-982-2800
FAX: 301-220-2619

DISTRICT OF COLUMBIA · ALAN K. ARNOLD · PE906144 · CIVIL · PROFESSIONAL ENGINEER · 5-9-2013

ARCHITECT/ENGINEERS:

EWING COLE
1025 Connecticut Avenue, NW
Suite 900
Washington, DC 20036-5405
Tel: 202-467-1500 Fax: 202-296-8950

Drawing Title: **Civil Layout Plan**

Approved: Project Director

Project Title: OIF / OEF WELCOME CENTER
DEPARTMENT OF VETERANS AFFAIRS
VAMC

Location: Veterans Affairs Medical Center
50 Irving Street NW Washington DC

Date: 4-30-2013 | Checked: JMS | Drawn: EI

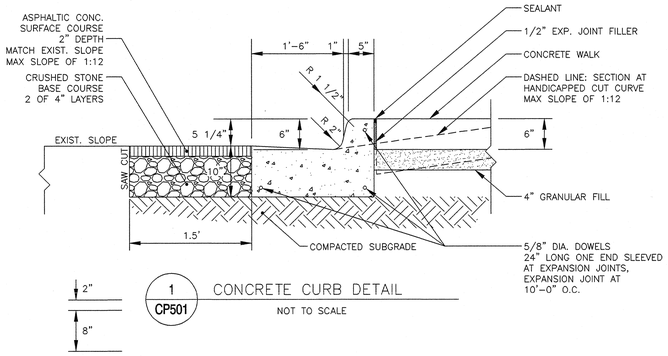
Project Number: 688-334 OIF/OEF

Building Number: -

Drawing Number: **CP101**

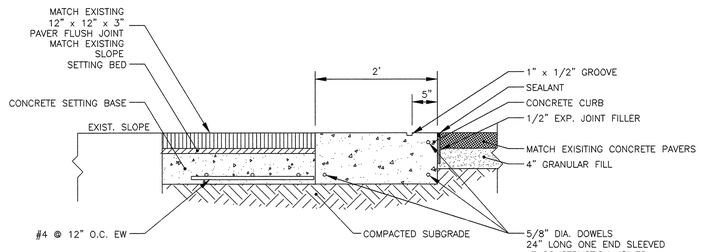
Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231



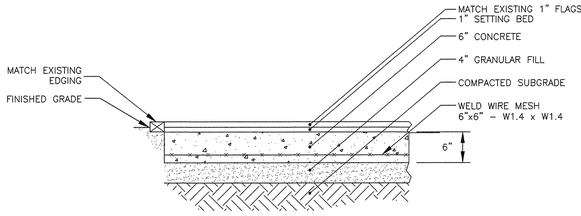
1 CP501 CONCRETE CURB DETAIL

NOT TO SCALE



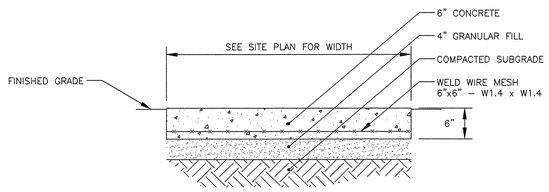
5 CP501 CONCRETE CURB

NOT TO SCALE



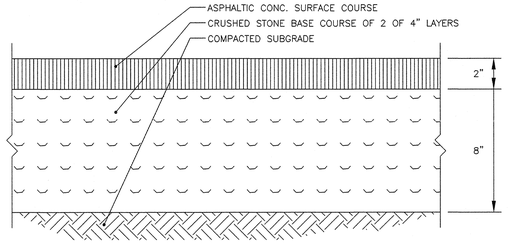
8 CP501 FLAGSTONE DETAIL

NOT TO SCALE



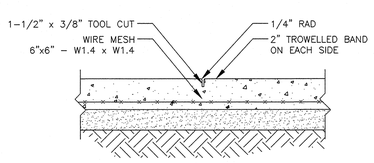
2 CP501 SIDEWALK DETAIL

NOT TO SCALE



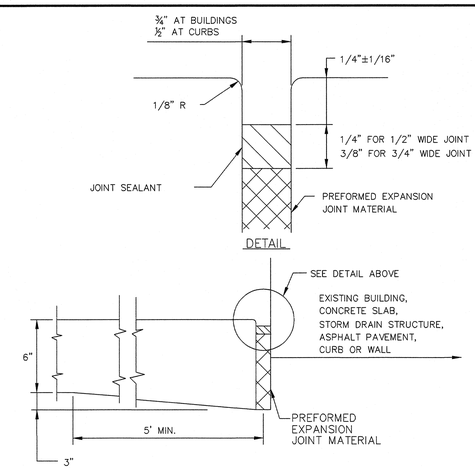
6 CP501 ASPHALTIC CONC. SECTION

NOT TO SCALE



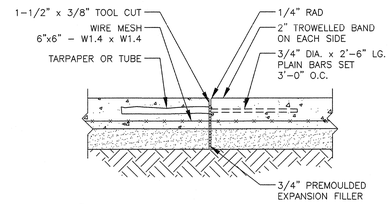
3 CP501 CONTRACTION JOINT (C.J.)

NOT TO SCALE



4 CP501 THICKENED-EDGE ISOLATION JOINT

REINFORCED AND PLAIN CONCRETE PAVEMENTS
NOT TO SCALE



7 CP501 EXPANSION JOINT (E.J.)

NOT TO SCALE

Revisions:	Date
ISSUE 1 - ISSUE FOR CONSTRUCTION	04.30.2013
95 % SUBMISSION	02.17.2012
75 % SUBMISSION	03.16.2011
25 % SUBMISSION	10.29.2010

CONSULTANTS:

GREENHORNE & O'MARA, INC.
6110 FROST PLACE
LAUREL, MD 20707
PHONE: 301-982-2800
FAX: 301-220-2619

DISTRICT OF COLUMBIA ALAN K. ARNOLD PE906144 CIVIL PROFESSIONAL ENGINEER 5-9-2013

ARCHITECT/ENGINEERS:

EWING COLE
1025 Connecticut Avenue, NW
Suite 900
Washington, DC 20036-5405
Tel: 202-467-1500 Fax: 202-296-8950

Drawing Title: **Civil Layout Details**

Approved: Project Director

Project Title: OIF / OEF WELCOME CENTER
DEPARTMENT OF VETERANS AFFAIRS
VAMC

Location: Veterans Affairs Medical Center
50 Irving Street NW Washington DC

Date: 4-30-2013 | Checked: JMS | Drawn: EI

Project Number: 688-334 OIF/OEF

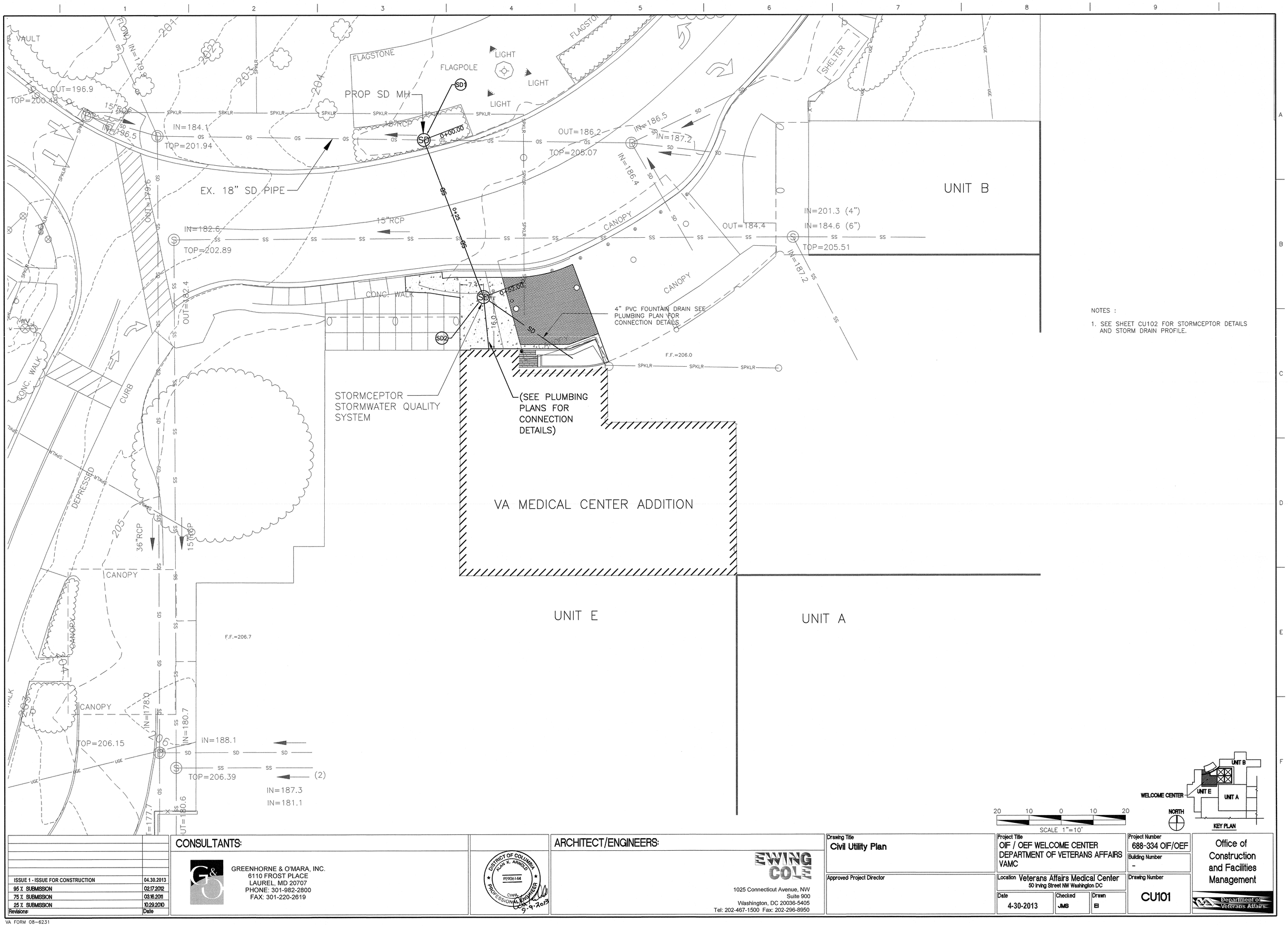
Building Number: -

Drawing Number: CP501

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



NOTES :

1. SEE SHEET CU102 FOR STORMCEPTOR DETAILS AND STORM DRAIN PROFILE.

three inches = one foot 6"
one and one half inches = one foot 6"
one inch = one foot 6"
three quarters inch = one foot 6"
one half inch = one foot 0
three eighths inch = one foot 0
one quarter inch = one foot 0
one eighth inch = one foot 0

Revisions:	Date
ISSUE 1 - ISSUE FOR CONSTRUCTION	04.30.2013
95 % SUBMISSION	02.17.2012
75 % SUBMISSION	03.16.2011
25 % SUBMISSION	10.29.2010

VA FORM 08-6231

CONSULTANTS:

GREENHORNE & O'MARA, INC.
6110 FROST PLACE
LAUREL, MD 20707
PHONE: 301-982-2800
FAX: 301-220-2619

DISTRICT OF COLUMBIA ALAN K. ARNOLD PE906144 CIVIL PROFESSIONAL ENGINEER 5-9-2013

ARCHITECT/ENGINEERS:

EWING COLE
1025 Connecticut Avenue, NW
Suite 900
Washington, DC 20036-5405
Tel: 202-467-1500 Fax: 202-296-8950

Drawing Title: **Civil Utility Plan**

Approved: Project Director

Project Title: OIF / OEF WELCOME CENTER
DEPARTMENT OF VETERANS AFFAIRS
VAMC

Location: Veterans Affairs Medical Center
50 Irving Street NW Washington DC

Date: 4-30-2013 | Checked: JMS | Drawn: EI

Project Number: 688-334 OIF/OEF

Building Number: -

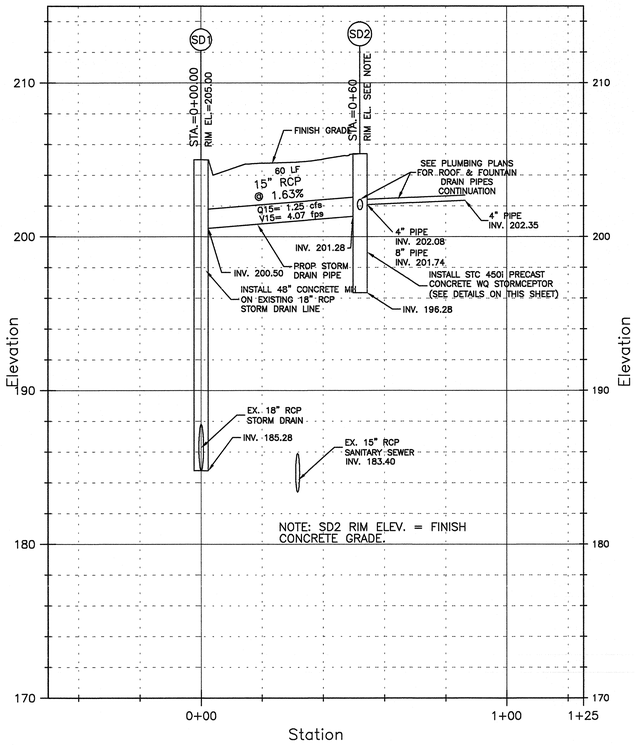
Drawing Number: **CU101**

20 10 0 10 20
SCALE 1"=10'

KEY PLAN

Office of Construction and Facilities Management

Department of Veterans Affairs



SD NETWORK # 1
HORZ. SCALE 1"=20'
VERT. SCALE 1"=4'

PROFILE STORM DRAIN PIPE OUT OF WQ STORMCEPTOR STRUCTURE

STORMCEPTOR COMPUTATIONS:

DA (Roof)= 6,800 sq.ft.= 0.16 ac.
RCN (Roof)= 98
Tc= 10 min.
P(in)= Use Maryland Department of Environment (MDE) Environmental Site Design (ESD) design manual for computation of the rainfall depth (P) required to provide 100% ESD treatment.
B soil, with 100% impervious area requires P= 2.6"
Use TR-55 to determine the Q for 2.6" rainfall.
Q= 0.47 cfs (Q used in the Stormceptor design)

Revisions	Date
ISSUE 1 - ISSUE FOR CONSTRUCTION	04.30.2013
95 % SUBMISSION	02.17.2012
75 % SUBMISSION	03.16.2011
25 % SUBMISSION	10.29.2010

CONSULTANTS:

GREENHORNE & O'MARA, INC.
6110 FROST PLACE
LAUREL, MD 20707
PHONE: 301-982-2800
FAX: 301-220-2619

DISTRICT OF COLUMBIA ALAN K. ARNOLD PE906144 CIVIL PROFESSIONAL ENGINEER 9-Jul-13

ARCHITECT/ENGINEERS:

EWING COLE
1025 Connecticut Avenue, NW
Suite 900
Washington, DC 20036-5405
Tel: 202-467-1500 Fax: 202-296-8950

Drawing Title: **Civil Utility Profiles**

Approved: Project Director

Project Title: OIF / OEF WELCOME CENTER
DEPARTMENT OF VETERANS AFFAIRS
VAMC

Location: Veterans Affairs Medical Center
50 Irving Street NW Washington DC

Date: 4-30-2013 | Checked: JMS | Drawn: EI

Project Number: 688-334 OIF/OEF

Building Number: -

Drawing Number: **CU102**

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231